

### References

FORSCOM/ARNG Reg 55-1: Unit Movement Planning, Chapter 1

FORSCOM/ARNG Reg 55-2: Unit Movement Data Reporting, Chapters 2 and 4

TB 55-46-1: Standard Characteristics for
Transportability of Military Vehicles
and Other Outsized/Overweight
Equipment

### Scope of Lesson

Unit Movement Data Information
 Systems and Reports

• TB 55-46-1



### Unit Movement Data Defined

"Unit Movement Data (UMD) is a list of equipment

and supplies the unit plans to deploy to accomplish

its mission. It includes the transportability data necessary to plan the move."

Ref: FORSCOM/ARNG REG 55-1 pg 6

#### UMD - General

- UMD The information of record for planning & executing movement of Army units (AC & RC)
- All deployable units (Active Component, Army National Guard and U.S. Army Reserve) are responsible for updating UMD & ensuring data is maintained accurately (using the Transportation Coordinators'-Automated Information for Movements System II [TC AIMS II] & updates transmitted to FORSCOM
- Supporting Installations & Mobilization Stations support units for UMD update and reporting

# UMD Information Systems

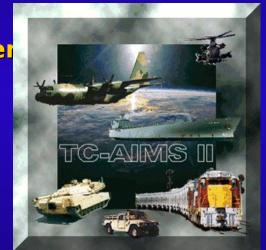
IMS II (Transportation Coordinatery Stems Sormation for Management System Two)

IPASS (Computerized Movement Planning and Status Syster

**ES** (Joint Operational Planning and Execution System)

CCS (Global Command and Control System)

RG II (Joint Force Requirements Generator)

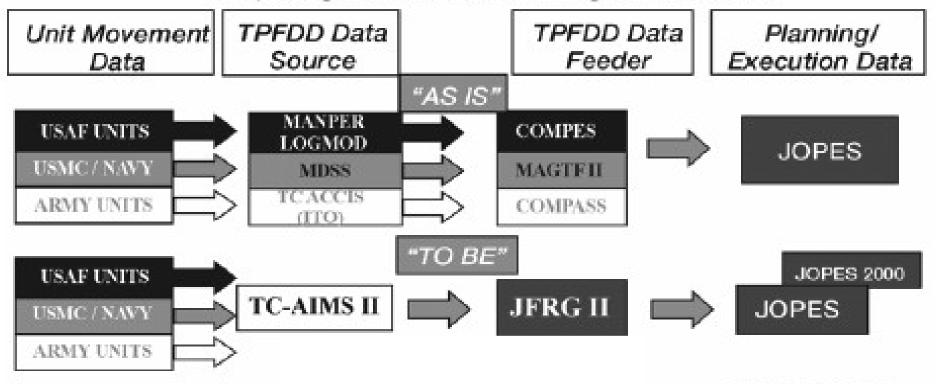


CCIS (Transportation Coordinator Automated Command and Control Information System)

#### Joint Deployment Information Systems Improvement

Leveraging Current Capabilities

Preparing for Future Technological Advances



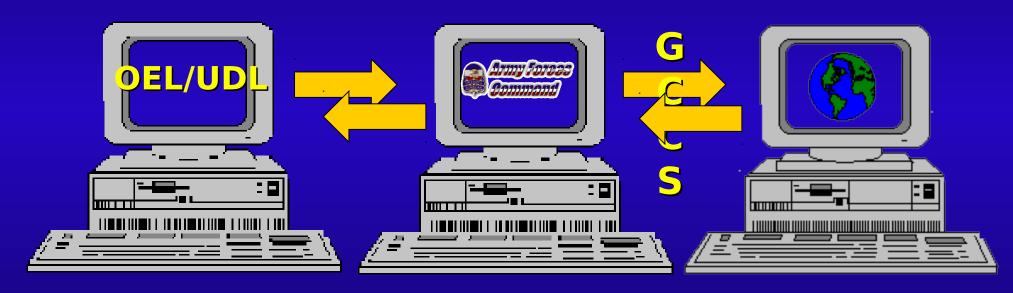
Ref: FM 3-35.4, p.1-8



### TC-AIMS II Information Flow



UMC / ITO MACOM(FORSCOM) JCS



TC-AIMS II JFRG II / COMPASS JO

**JOPES** 

**UNCLASSIFIED** 

**SECRET** 

## Computerized Movement Planning and Status System (COMPASS)

- FORSCOM's information system &
- Propidese accurate & timely UMD to DOD, JCS, HQDA, Army installations &
- Baitabase supports planning & execution
- TC-AIMS II is the primary source of UMD submission into COMPASS

#### TC-AIMS II

 Transportation Coordinators'-Automated Information for Movements System II

 Automated system used by units and installations for updating & maintaining UMD

# UMD Update & Maintenance Requirements

- FORSCOM requirements dictate that UMD must be current & accurate at all times
- FORSCOM requires UMD to be validated at least annually by all units & updated whenever a <u>significant change</u> in transportation requirements occurs

### Significant Transportation

Requirement Change: Any Significant transportation change: Any increase or decrease in unit movement requirements that results in:

Addition or subtraction of one or more rail cars, semi-trailers, trucks, passenger conveyances (buses)

Requires the allocation of more (or less) aircraft or ship deck space

### No Change Reports

 A "No Change" report <u>must</u> be submitted by units with no changes to report for the update period

 The UMC processes the "No Change" report with other units' updates

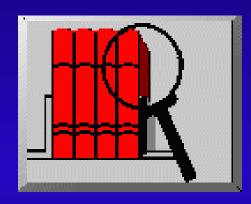
## Organizational Equipment List (OEL)

- OEL Most commonly used UMD report
  - Contains:

Lists individual pieces of unit equipment and provides their dimensional characteristics, mode of transportation to the POE and square footage

### FORSCOM Reg 55-2, Data Reference Tables

Reference: FORSCOM Reg. 55-2, Chapter 4



- <u>Data Reference Tables</u> for OEL Reports (Figures 4-1 and 4-3)
- Explains key data elements (Figures 4-2 and 4-4)

## Unit Deployment List (UDL)

 UDL - An OEL tailored to reflect the actual equipment being deployed for a specific operation/e

 OEL must be developed to show actual movement requirements

## TC-ACCIS/TC-AIMS II Terminology

**TC-ACCIS** 

TC-AIMS II



AUEL (OEL) Organizational Equipment List

DEL

Unit Deployment List (UDL)

Ref: FM 3-35.4, p.1-9

### FORSCOM Reg 55-2 Tables 5-1 to 5-6

- Provide codes extracted from MILSTAMP manual
- Codes include:
  - -Water Commodity Code (WCC)
  - -Type Cargo Code (TCC)
  - -Special Handling Code (SHC)
  - -Mode to POE Code (MPE)
  - -Type Pack Code (TPC or TP PK)
  - -Type Equipment Code (TE)
- Codes used in AUEL/DEL reports

lef: FORSCOM Reg 55-2 pp.49-54

#### MILSTAMP Codes

- Commodity Code 5 positions eg 885 Z 9
  - Positions one through three Water
     Commodity Code (WCC)
  - Position four Type Cargo Code (TCC)
  - Position five Special Handling Code (SHC)

Date: 20041215

Equipment

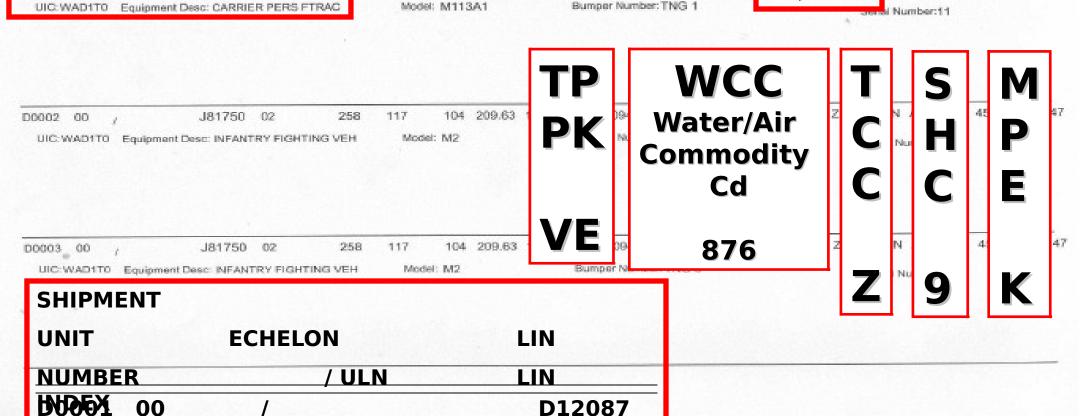
UIC: WAD1T0

Unit Name:

00

0041 IN BN 02 HH

Water/Air Item Planned Actual Shipment cgo H rensions in Inches LIN Square. Cubic Weight Loaded Loaded **Echelon** H Unit C. CAT Weight M-Ton S-Ton Feet Feet. in Lbs. Weight Indigo Length AULN: LIN Number **VE** 876 9 K 23.33 933,33 19996 22496 19996 Z N A2D B D12087 07 100 84 133,33 D0001 00 Z Bumper Number: TNG 1 Model: M113A1



D12087

0.71 of 12 \* ER = Error, Multiple Mode to Port Codes.

Equip Desc: CARRIER PERS FTRAC over the M-Ton calculation. UIC: WAD1T0

### MILSTAMP Codes (Cont)

- Table 5-6: Type Equipment Codes (TE)
  - Identifies the type of equipment being
  - Example: Code "3" indicates 'Vehicles, wheeled (self propelled), 2-1/2 ton or
  - less' - Example: "M" indicates 'Class A
  - Examples'C" indicates 'Vehicle, tracked or half tracked except tanks and self-propelled artillery' code for tractor from the OEL

### MILSTAMP Codes (Cont)

TRK CGO D/S 2.5 Ton with Flammable Liquids



### SUMMARY



TB 55-46-1 Standard Characteristics for Transportability of Military Vehicles and Other Outsized/Overweight Equipment

### TB 55-46-1 Familiarization

- Provides dimensions, weight & cube for: Military vehicles Vehicle-mounted equipment Outsize/overweight equipment
- Organizations use data as the standard reference when developing/reporting
- Information for planning purposes only, units must report actual dimensions & weight in their OEL ef: Para 1-1a, page 1-1

# TB 55-46-1 Familiarization ... (Cont)...

- Data specifically oriented to unit movement transportability/deployability considerations
- Compatible with COMPASS/JFRG II and JOPES
- Remember, doesn't replace actual UMD

## TB 55-46-1 Familiarization

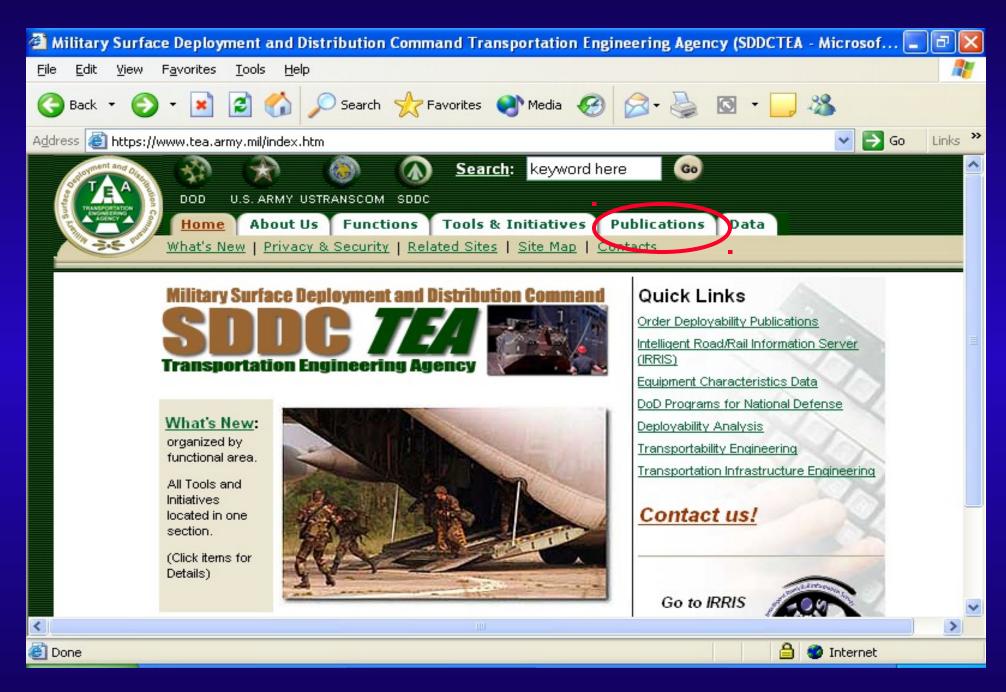
- Lists all military outsized berweight equipment having dimensions and/or weight EQUAL TO or EXCEEDING:
  - + 104 inches long + 84 inches wide + 5000 pounds or
  - + <u>50</u> inches high more
- Dimensions/weight must be <u>equal to</u> or <u>greater than</u> any <u>one</u> of the above criteria for a piece of equipment to be listed in the TB

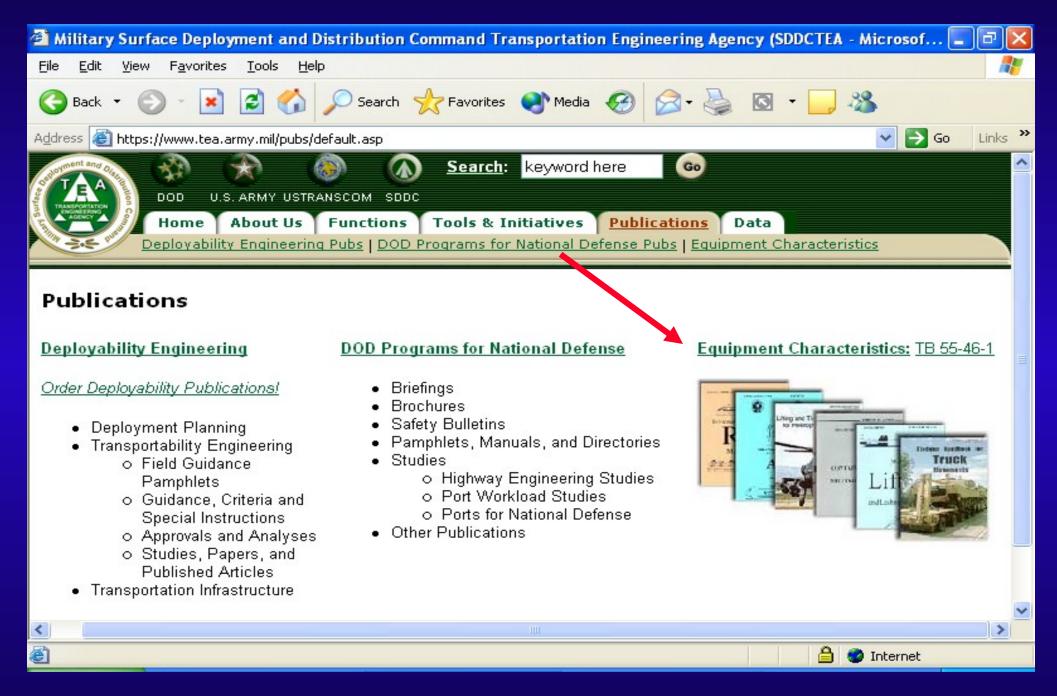
### TB 55-46-1 Familiarization

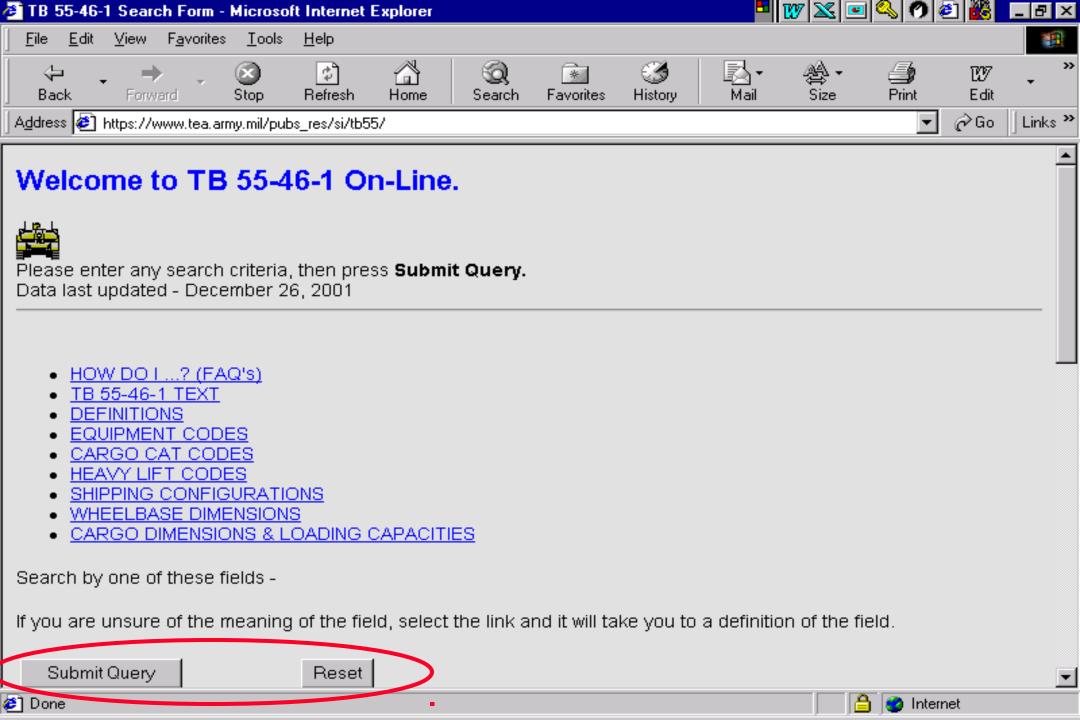
• Data for <u>all military equipment, including</u> items excluded from the hardcopy TB 55-46-1, are available online at:

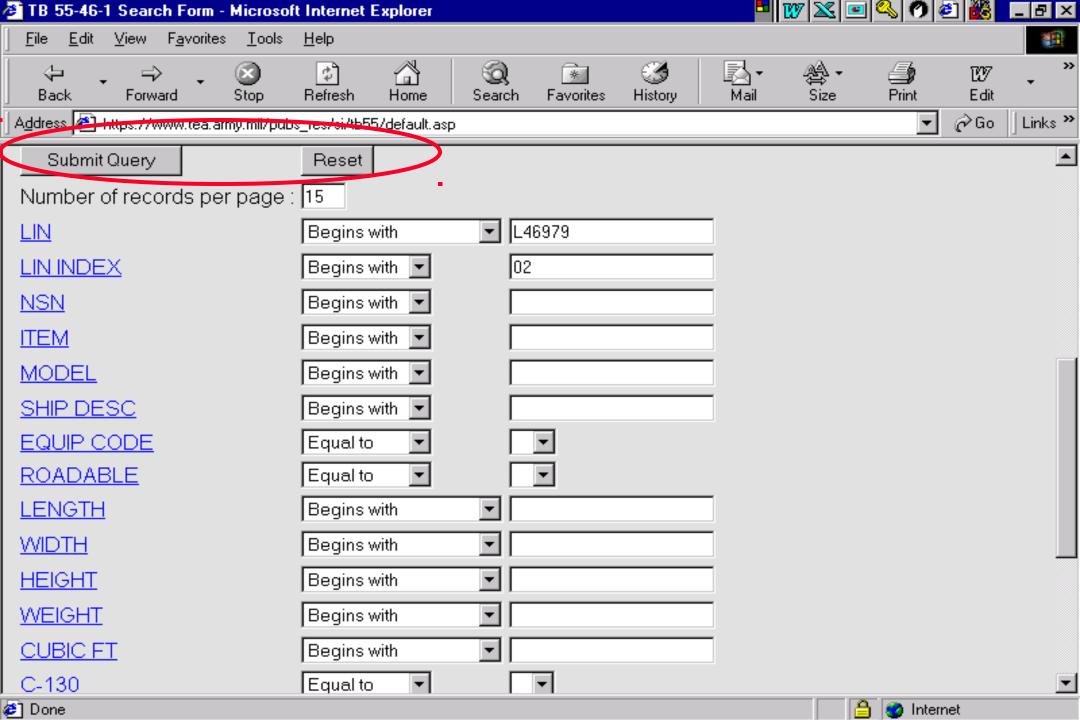
https://www.tea.army.mil/pubs/default.asp (AKO password required)

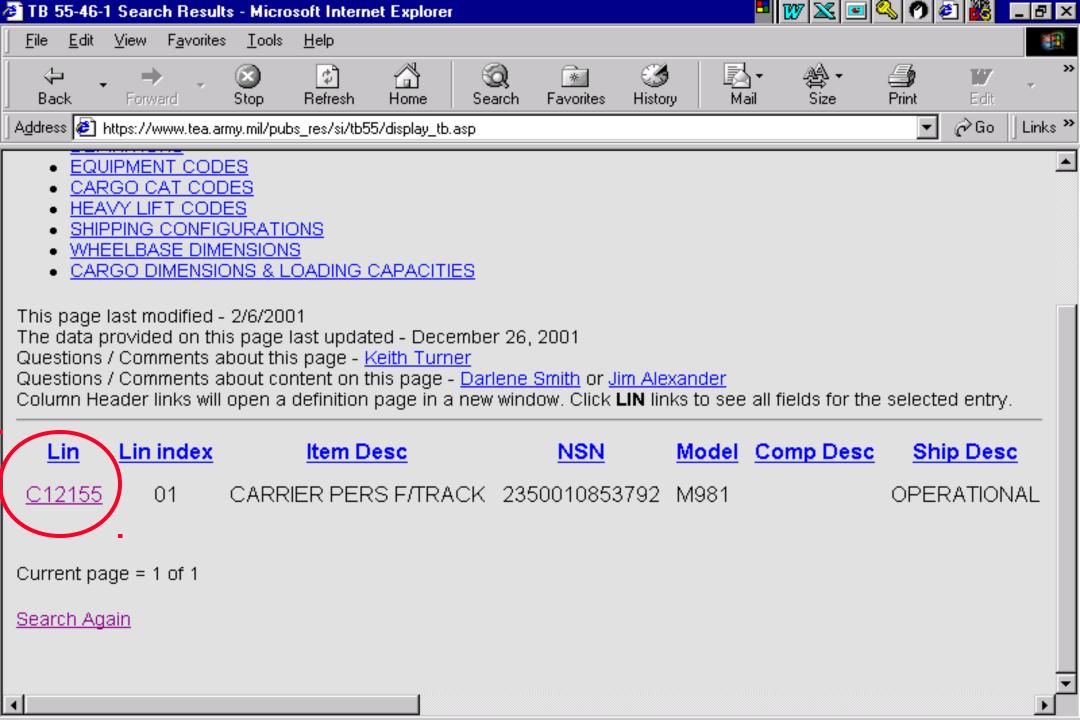
 SDDC TEA also produces a CD that contains this information

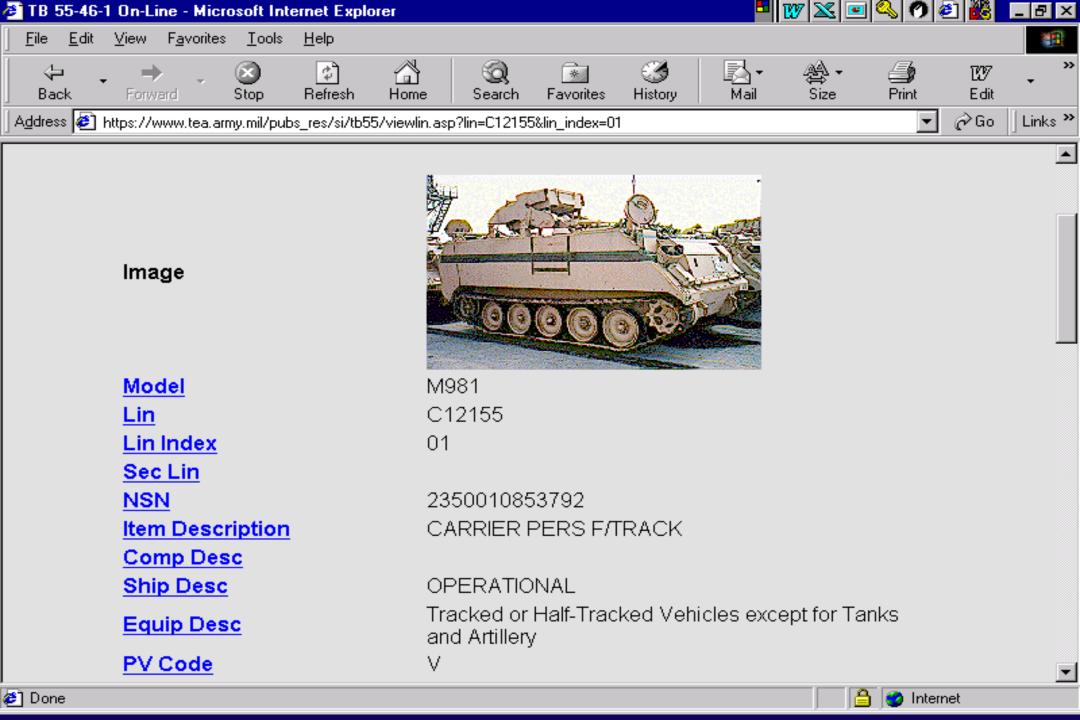












### TB 55-46-1 Familiarization

- TB 55-46-1 contains of the pters, 3
- Appendixes Several ways to retrieve data
  - If TOE LIN is known, go to Chapter 3
  - Use cross reference in Appendix B & C
    - Appendix B crosses NSN to TOE LIN
    - Appendix C crosses model description to TOE LIN

## TB 55-46-1 Chapter 1

Chapter One contains:

What is covered by TB

Important definitions

Data specifications
- UMD Reporting procedures using

TB

#### **Definitions**

★Line Item Number (LIN) - A <u>six-character</u> alphanumeric identification assigned to a generic nomenclature to describe collectively all NSN items possessing the functional capability expressed by the LIN

description

eg: X 4 0 7 9



- •M54A2C
- •M54A1C
- •M923
- •M923A1
- •M923A2

### Definitions (Cont)

- National Stock Number (NSN) The NSN consists of 13-digit number assigned by the Defense Logistics Services Center:
- eg: 1055010920596



**MLRS** 

### Definitions (Cont)

- Set: A group of major end-items
  - The entire set is assigned a LIN. This is the 'primary' LIN for the set
  - Each major end-item within the set is referred to as a secondary item and is identified by its own "secondary" LIN and NSN

## SET

TOE LIN ( INDEX ) NO Primary LIN	NATL STOCK NO. (SET) (TOE LIN)	COMP	V E H - C L E	TYPE EQU-P	LIN DESCRIPTION ( MODEL ) COMPO DESCRIPTION
R93035	(SET)				RADIO TERMINAL SET
V 03	Remarks 5820 <del>0114</del> 83976 lary LIN (G42170)		R	U 3	AN/TRC-170V3 AN/TRC-170V3 GEN SET DED TRL MTD
V 01	6115 <u>61319</u> 9032 (T07679)		R	6	PU-798 TRK UTIL. HVY HMMWV
V 36	230013469137		R	3	M1097 .

### Definitions (Cont)

Vehicle: Term including trucks, trailers, semi-trailers, amphibious & tracked vehicles, tanks, artillery (self-propelled & towed), floating craft (self-propelled & towed), rail cars, locomotives, aircraft (including helicopters) & wheel or track-mounted



# Chapter 2-3: Data <a href="Dimensions: Objectifications">Dimensions: Objectifications</a>

- <u>Length</u>: Horizontal dimension measured from end-toend. Rounded up to next inch
- Width: Horizontal dimension measured from side-toside. Rounded up to next inch
- side. Rounded up to next inch

  Height: Vertical dimension measured from ground level to the highest reference point. Rounded up to
- <u>\$hfa@xverible Weight</u> (less heavy armor vehicles/tanks): Includes all on-equipment material (OEM), such as basic issue items (BII), and three-quarters of a tank of fuel. It does not include crew weight, baggage, or payload.

# Chapter 2-3 Data Specifications (cont)

- Dimensions (cont):
  - <u>Cube</u>: The volume of space occupied by the item
  - FORMULA: (L x W x H) /1,728 = cubic feet inches
  - Round up to the next cubic foot

## Chapter 2 Tables 2-1 to 2-4

Tables 2-1 to 2-6 contain information on the transportability of equipment by aillables 2-1 & 2-2 contain information on the cargo constraints of various aircraft (maximum cargo Table 2 reprevious guidance on the number and dimensions of 463L pallets that can be carried on CRAF aircraft Allowable Cabin Loads (ACL)

# Chapter 2 Tables 2-5 and 2-6

Table 2-5: Cargo Category Codes

Position Continue the type of equipment

'A' = Vehicles (wheeled and tracked), self propelled or non-self-propelled and are not suitable for road marching on overland deployment legs

'R' = Wheeled vehicles (self propelled or non-self propelled), suitable for road march on overland deployment legs and capable of convoy speeds up to 40 mph.

**Position 2**: Indicates if an item of equipment is non-air transportable, outsized, oversized or bulk

**Position 3:** Indicates whether an item of equiporal can or cannot be containerized

# Chapter 2 Tables 2-5 and 2-6 (Cont)

- Table 2-6: Heavy Lift and Dimensions Codes (H)
  - A code which identifies the weight bracket of the item (in short tons) and indicates whether it is under or over 35 feet in any dimension

#### **Cargo Category Codes**

First Position: Vehicle/Equipment Type



**ABRAMS MBT** 



**KIOWA WARRIOR** 



**LCU 2000** 

A = Non-roadable vehsB = Non-self deployable = Floating Craft

aircraft (uncrated)



DRUM FABRIC **FUEL** 



M998

= Non-vehicular cargoM = Ammunition R = Roadable Vehicles



### Cargo Category Codes

Second Position: Air Transportability

0 = Non-Air transportable



1 = Outsized Equipment



C-17



C-141

2 = Oversized Equipment



C-141

C-130



463L Pallet

3 = Bulk Equipment



463L Pallet 49

### Cargo Category Codes

#### Third Position: Containerization

B = Fit in 20-foot Container



20-foot Container (MILVAN)

C = Fit in 40-foot Container but not a 20-foot container



20-foot Container (MILVAN)



40-foot Container

D = Cannot be containerized



**40-foot Container** 

#### Heavy Litt and Dimension

<u>Codes A - P</u> categorize by weight and dimensions

•Codes A - G = variable weight and <u>less</u> than 35 feet in any dimension

Codes H - P = variable weight and more







## Chapter 2 Tables 2-7 to 2-15

- Tables 2-7 to 2-15 :
  - Contain dimensions & cargo-loading capacity of military general-purpose cargo trucks, dump trucks, trailers, semi-trailers, amphibious vehicles, landing craft & helicopters including:
    - Cargo deck dimensions
    - Loading height of cargo carrying vehicles



**WWN** 

(X40214)

#### **TABLE 2-7 CARGO DECK DIMENSIONS**



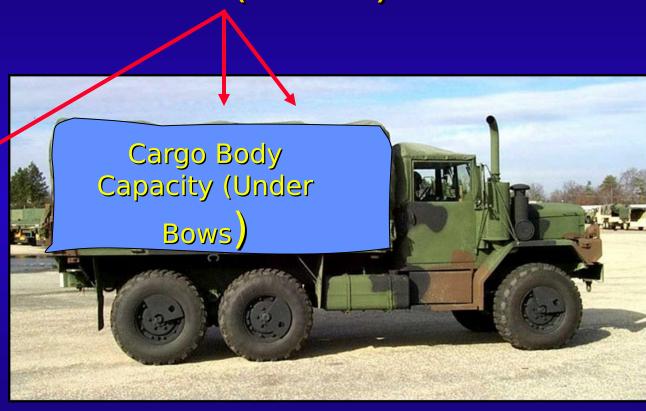
	Ca	argo D	eck	<u>Ca</u>	rgo Boay	Load	ling Hei	gnt a	and Capaci
Vehicle Type (LIN)	Length (in.)	Width (in.)	Bed Height (in.)	Unde Bows (in.)			p of Racks (ft³)		Top of ing Wheel (ft³)
2-1/2 Ton M35A2C	147.0	88.0	52.0	60.	443.0-w	<b>37.0</b>	277.0	29.	0 217.0

=443ft (Don't forget about 'w' = cubic capacity reduced by 6.6 cubic feet for curve3of bows)

#### Truck Bows







## M35A3C (2.5 T Truck)

#### Truck Side Racks



Top of Side Racks

M1078 (2.5 T Truck)

# Chapter 2 Tables 2-16 to 2-26

- Tables 2-16 to 2-25 contains wheel base inform
  - Primarily used by upper level planners
    - Seldom used at unit level
- Table 2-26 is a metric conversion table

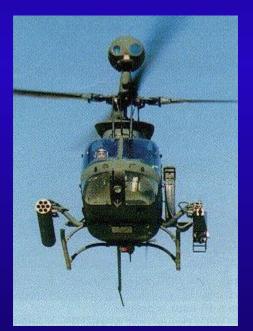


# Chapter 3 -Equipment Characteristics Data

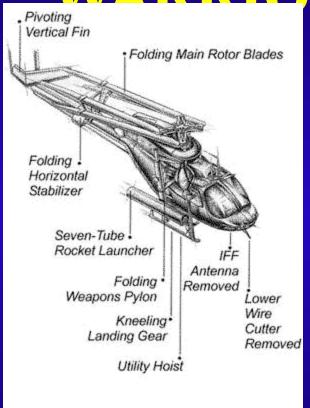
- Characteristics Data
  Contains Equipment Characteristics Data
  - Starts with detailed explanation of the information contained in each column
  - 11 columns of data
- Column One: TOE LIN --Table of Organization & Equipment Line Item Number

**TOE LIN** Column 1: (INDEX) NO **TOE LIN Army TOE LIN Navy** T61494 **CB0539 TOE LIN Air Force AF2955 TOE LIN Union (AALPS)** YU0285 **YA0095** TOE LIN Fictitious





KIOWA WARRIOR





**REDUCED CONFIGURATION FOR TRANSPORTATION** (two fit into a C130)

# Chapter 3 Column 1(Cont)

**TOE LIN** Column 1 (Cont): (INDEX) **TOE LIN number** NO "PV" - Preferred A21633 Model (generally 01 largest and most 03 current model) & 04 Validated Data (by 05 SINIC Validated Pata

See LIN A21633 on p.3-7

# Chapter 3 Column 1 (Cont)

Column 1 (Cont):

Index No: Identifies different NSNs &/or`shipping configuration

See LIN A21633 on p.3-7

**TOE LIN** (INDEX) NO A21633 03 04

- Column 2:
- NSN. Identifies a specific equipment model within a LIN



NATL STOCK NO. 0 (SET) N (TOE LIN) 1520011255476

See LIN A21633 on p.3-7

## Chapter 3 Column 2 (Cont)

Column 2 (Cont): (SET) The TOE LIN in parentheses is the proper TOE LIN to be used for reporting a

set E C Y TOE LIN NATL STOCK NO. LIN DESCRIPTION 0 (INDEX) (SET) (MODEL) М NO (TOE LIN) COMPO DESCRIPTION Ε Q U R93035 (SET) **RADIO TERMINAL SET** Remarks AN/TRC-170V3 V 035820011483976 AN/TRC-170V3 U (G42170) **GEN SET DED TRL MTD** V 01 6115013199032 PU-798 (T07679)TRK UTIL. HVY HMMWV 230013469137 V 36 M1097

64

Column 3:
 Component.
 Alphabetic code added to an NSN to identify a

Doinotsise the modified NSN for reporting purposes

See LIN A21633 on p.3-7

lef: Para 3-1e, page 3-1

NATL STOCK NO.
(SET)
(TOE LIN)

C O M P



1520011255476

Landing Skid

65

 Column 4: Vehicle. Code indicates whether vehicle is roadable or nonroadable.

- "N" = Nonroadable (not suitable for road

marching)

- "R" = Roadable (capal
mph)

ning 40

N

R

See LIN A21633 on p.3-7 and LIN T07679 on p.3-302

Ref: Para 3-1f, page 3-1

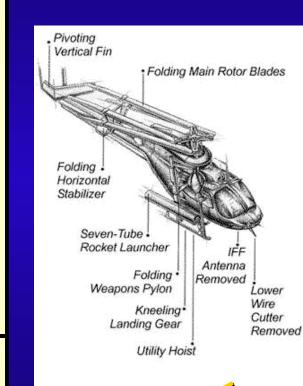
Column 5: Type Equipment. Numeric code used to differentiate between equipment types:

- "H" = Aircraft, rotary wing

(opera

- "K" = config





E

E

Q

See LIN A21633 on p.3-7

ef: Para 3-1g, page 3-1/3-2

Column 6: LIN DESCRIPTION LIN Description: < - - MODEL - - > Generic - COMPO DESCRIPTION - ) nomenclature **AERIAL SCOUT HELICOPTER** assigned a LIN **OH-58D** (Madajonal **OH-58D LANDING SKIDS** dempontion) **Description:** 

See LIN A21633 on p.3-7

lef: Para 3-1h, page 3-2

• Column 7: Shipping

42dfffgreationdes

"8" = Flyaway (see 3-7)

"F" = Reduced for C-130 Transport (see 3-7)

"B" = Operational (Mission configuration) (see 3-394)

"C" = Reduced to minimum shipping dimensions IAW the unit's organic maintenance capability (for example, removing canvas tops, frames and bows; securing antennas; etc)

See LIN A21633 on p.3-7

and LIN X40009 on p.3-412

- Column 8: Number of Pieces:
  - The data in this column indicates the number of identical disassembled components - as detailed in the 'component description' in Column 6
  - The dimensions given in column 9 relate to a single item

NO. PCS

See LIN A21633 on p.3-7

Ref: Para 3-1j, page 3-4

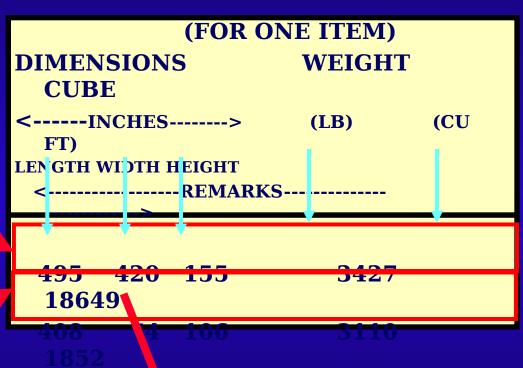
 Column 9: Dimensions, Weight & Cube for one item as described by 'Model' or 'Component Description' &

**Shipping Configuration** 





See LIN A21633 on p.3-7



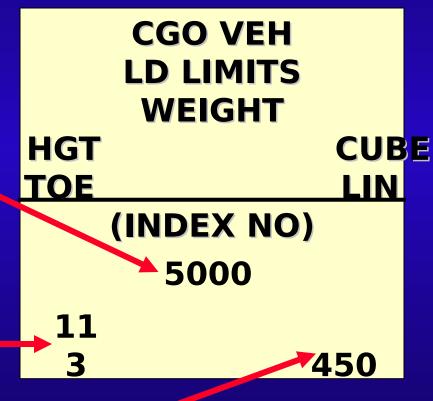
420 (Operational width) 74 (Reduced width)

Column 10: Cargo Vehicle Load Limits

Weight, Height & Cube



Offroad rated load capacity Heightinds) (Cargo deck + Height Under Bows (in inches)



See LIN X40009 on p.3-416µþj¢ capacity 'Under Bows' (in cubic fee

### Chapter 3 Column 11

Column 11(Cont): Cargo Load

#### **Indicator:**

"C" (certified by the Air Force) or "X" (qualified for aircraft [will fit]) or blank (not transportable in specified aircraft)

```
< C=AF CERTIFIED >
<AMC > <CRAF>
    1 1 81 44
    0 3 0 77
 CCC
```

Column 11(Cont):

 Cargo Load Indicator
 CRAF (left to right):
 DC-8, DC-10,

 Ceargo Load Indicator
 AMC > <craf>
 CCCCKK DDBB CT

B-747S & B-747N

Indicator:

C or X oblankk

```
< C=AF CERTIFIED >
        CC77
         8144
          SN
         CCC
```

See LIN T61494 on p.3-357

ef: Para 3-1n, page 3-4/3-5

## Chapter 3 Cont(Cont)

Column 11(Cont(Cont)

```
Cargo Load Indicator < C=AF CERTIFIED >
                           < X= JCSCO LOAD IND
       CTN:
       20 ft (containers) < AMC > < CRAF>
    Indicator:
                                          20
      Y = Fits
                            01 03
      N = Not
See LIN T61494 on p.3-357
```

Ref: Para 3-1n, page 3-4/3-5

### Chapter 3 Column 11

Column 11(Cont(Cont)

Cargo Load Indicator < C=AF CERTIFIED > CTN:

Y = Fits

N = Not

Fit

```
< X= JCSGO LOAD IND -
10-ft (containers) < AMC > < CRAF >
                      1115CC CC77 20
                      01 03
```

Column 11(Cont):
 Cargo Load Indicator

463L (pallet) Indicator:

Y = Fits

N = Not

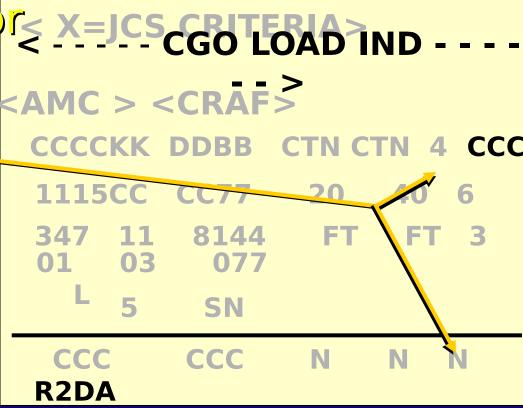
Fit

```
    X = JCSGO LOAD IND
```

• Column 11(Cont):

Cargo Load Indicators x=1

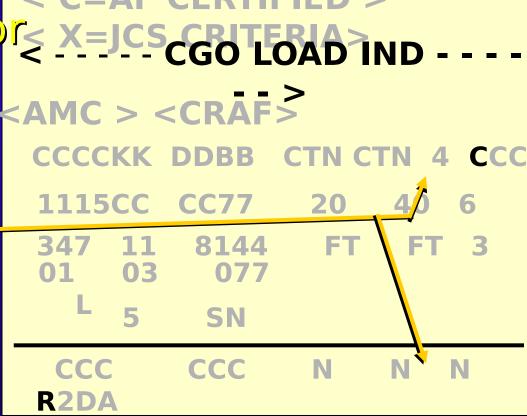
CargoCategoryCodes



• Column 11(Cont):

Cargo Load Indicator x=J

- Cargo
Category
CGodespe
Equipment



Column 11(Cont): Cargo Load Indicator X=JCSCGO LOAD IND

- Cargo Category

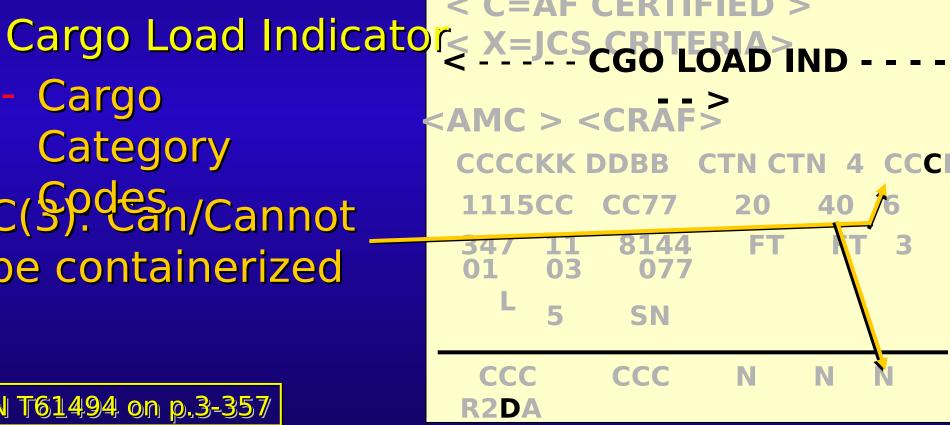
C(2) Praicates if item is air transportable

See LIN T61494 on p.3-357

Ref: Para 3-1n, page 3-4/3-5

Column 11(Cont):

Cargo Category C(Spdesn/Cannot be containerized



Column 11(Cont):

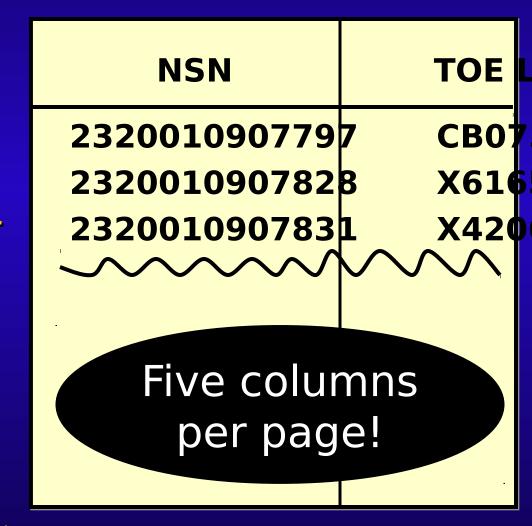
Cargo Category H: Weight and dimensions (<35' or >35')

Cargo Load Indicator X=JCS CGO LOAD IND 20

- What did our CCCH code of "R2DA" mean?
  - First: wheeled vehicle, roadable
  - Second: oversized exceeding 463L
  - pallet size Third: cannot be containerized (too wide)
  - Fourth: under 5 tons smaller than 35' in any dimension

## Appendix B - Cross Reference

- Appendix B:
  - Cross-reference
     NSN to TOE LIN
- First column is NSN listed in ascending sequence
- Second Column is corresponding TOE LIN



## Appendix B - Cross Reference

 Two listings for NSN 2320011077155

- First is CB0360
  - What does this TOE LIN tell you?
- Navy vehicle
   Next TOE LIN is
   the Army vehicle
   (M998)

NSN	TOE
232001090779	7 CB0
232001090782	B X61
232001090783	1 X420
~~~~	$\sim\sim$
232001101675	2 CB0
232001107715	3 T05
232001107715	5 CB03
232001107715	5 T61
232001107715	6 T61

### Appendix C -Cross Reference

#### Appendix C:

- Cross-reference equipment model designation to TOE LIN
   Contains more information than
- - Appendix Bitem description, the shipping configuration, the cargo group code, the length and width, and the empty and loaded height and weight

## Appendix C Cross Reference (Cont)

MODEL	DESCRIPTION		L	N -
M983 WWN	TRUCK TRACTOR TACT	8X	8 T88	67
M983 WWN	TRUCK TRACTOR TACT	8X	8 T88	67
M983/M901	TRK TRAC/LCHR STA 6		YA	022
$\sim$				
M997A1	TRK AMB 4 LITTER 4X	45	T;	88
M998	TRK UTIL CRG/TRP CA	FER	T6	L49
M998	TRK UTIL CRG/TRP CA	KR	T6	L49
M998	TRK UTIL CRG/TRP CA	RA	T6:	49
		$\checkmark$	5	

#### UMD Reporting Procedures

- TB 55-46-1, equipment characteristics data listings are designed to facilitate preparation of UMD reports
- Data reflects specified shipping configurations Use only for planning purposes
- FORSCOM Reg 55-2 requires use of TC-ACCIS / TC AIMS II for reporting UMD to FORSCOM

### UMD Reporting Procedures (Cont)

- Use of LIN & INDEX NO: When combined & properly reported, the computer (TC-ACCIS or TC-AIMS II) generates data listed to the right of the INDEX NO
- Errors in reporting either data element will result in the computer generating erroneous (BAD) data

#### Summary

Chapter 1 - Purpose, Definitions, Data Specifications

Chapter 2 - Tables for Cargo Deck Dimensions

Chapter 3 - Equipment Characteristics (items are listed by TOE LIN)

Appendix B - National Stock Number to TOE LIN

Appendix C - Model designation to TOE LIN

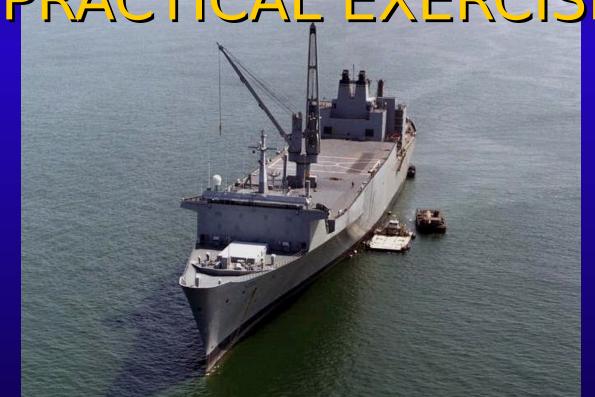




# QUESTIONS ???







#### · You will Projectical fexencise of pernation:

- 13 digit number it is a NSN use Appendix B (NSNs listed numerically) to find the LIN and then refer back to Chap 3
- 6 alphanumeric characters most likely a LIN look it up in Chapter 3 (LINs listed alphanumerically)
- Variable number (other than six) of alphanumeric characters - most likely a <u>Model Designation</u> - look it up in Appendix C (models listed alphanumerically) - refer back to Chap 3 using the LIN for this model to find additional information (if required)
- Cargo Deck Dimensions refer to the tables in Chap



